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| | ALIGNMENTS SULT 1 -09-434-288-11 -09-434-288-11 -09-434-288 Patent No. 6303767 GENERAL INFORMATION: APPLICANT: Betlach C., Melanie APPLICANT: Betlach C., Melanie APPLICANT: Betlach C., Melanie APPLICANT: BODATE: POLYKETIDE SYNTHASE ENZYMES AND RECOMBINANT DN. TITLE OF INVENTION: CONSTRUCTS THEREFOR FILE REFERENCE: 30062-20030.00 CURRENT APPLICATION NUMBER: US/09/434,288 CURRENT FILING DATE: 1999-11-05 PRIOR FILING DATE: 1998-11-05 PRIOR FILING DATE: 1998-11-05 PRIOR FILING DATE: 198-11-05 NUMBER OF SEQ ID NOS: 12 SOFTWARE: Patentin Ver. 2.1 SEQ ID NO 11 LENGTH: 3241 TYPE: DNA ORGANISM: Streptomyces narbonensis -09-434-288-11 Query Match Best Local Similarity 48.2%; pred. No. 1.3e-28; Matches 1028; Conservative 0; Mismatches 956; Indels 150; G Best Local Similarity 48.2%; pred. No. 1.3e-28; Matches 1028; Conservative 0; Mismatches 956; Indels 150; G | 771.88.22 771.88.22 771.88.22 771.88.22 771.88.22 771.88.22 |
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APPLICANT: BETLACH, Melanie C.
APPLICANT: BETLACH, Melanie C.
APPLICANT: McDANIEL, Robert
APPLICANT: TANG, Li
TITLE OF INVENTION: RECOMBINANT NARBONOLIDE POLYKETIDE SYNTHASE
FILE REFERENCE: 300622002120
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ENT FILING DATE: 1999-05-27
IER APPLICATION NUMBER: CIP OF 09/141,908
EER FILING DATE: 1998-08-28
IER APPLICATION NUMBER: CIP OF 09/073,538
IER FILING DATE: 1998-05-06
IER APPLICATION NUMBER: CIP OF 09/073,538
IER FILING DATE: 1998-05-06
IER APPLICATION NUMBER: CIP OF 08/846,247
IER FILING DATE: 1997-04-30
IER FILING DATE: 1999-02-08
IER FILING DATE: 1999-02-08
IER FILING DATE: 1999-02-08
IER FILING DATE: 1998-09-22
IER FILING DATE: 1998-09-22
IER FILING DATE: 1998-09-22
IER APPLICATION NUMBER: 60/100,880
IER APPLICATION NUMBER: 60/087,080
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| 1983 | 1924 TCCCCGGCCACGGCTCCCTCCGCGTCGGCGGCTGCAAGGTCATTGACGACCAGGCCGAAA | |
|--------------|--|--|
| 1923 2401 | 1864 ACAAGTTCAAGATCGAGTTCGGCTCCGCACCCACCTACACCCTCAAGGGCGACACCATCG | |
| 1863 2365 | | |
| 2305 | | |
| 2292 1803 | | |
| 1743 | 1684 ACACCGCCGACGAGGACTGCACCTACGAGCTCGGCCTCGTCGTCGCGGCACGGCAAAGG | |
| 1683 2233 | 1624 TGGTGGACTACCTACCACCCCAAGGCGGCAGACAGGTGGTACGCCGACATGGAGGGCACGT | |
| 2173 | | |
| 1623 | | |
| 1563 | AGCAGTGCCTCACGCCCGACGGCGCTCCGGGCATGCGCTGGAGGGTCTTCAACGAGCCCC | |
| 1503 2079 | 1444 TCGAGACGCCGCATCGTACACCGTCGGCGCCTACACCACCGTTCCTCCCATTCTAGGCG | |
| 1443 2019 | 1384 GCTCTGCCGCACTCAGGGCCTACTACGCAGTCACTCCCTTTGACGGCCTCAGCAAGCA | |
| 1383 1960 | 1324 AGAAGAAGAAGACGCTGATTGTCGGCCCCAACGCCAAGGCAGGC | |
| 1323 1900 | AGGTTGGCAACGAGGGCATCGTGCTGCTGAAGAACGAGAACAACGTTCTGCCCTTGAGCA | |
| 1263 1840 | 1204 CGGAGAACGGCCCCGAGACGACTGTCAACAACACCCCCGAAACGGCAGCTCTCCTCCGGA | |
| 1203 1780 | 1144 TTGACCAGAGGGCTAGGGAAGTTCTTCAGTTCGTCAAGAAGTGTGCCTGCC | |
| 1143 1740 | 1084 GCTTCCGAGGAGAAACACTCAAGTTCAACGTCTCAACGGAAAGCCCTTTATCCACGTCA | |
| 1083 1680 | CATACAGTACCACAGAAGCCGTTGTGGCAGGCCTCGACCTCGAGATGCCCGGACCTCCAC | |
| 1023 1627 | ATGGGATGCTTCGAAAGGAATGGGGTTGGGATGGCCTAATCATGAGCGACTGGTACGGCA | |
| 963 1567 | 904 TCATGACGGCGTACAATGGCATCAATGGCGTGTGCTGCAGCGAGAACCCTAAATATCTTG | |

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1984 TCGAAAAGTCCGTCGCCCAAGGAGCACGACCAGGTCATCATCTGCGCGGGCCTTA GCGCCACGCCGCTCTCCCTGGAGCTGGGCTGACGCCGGAGGCAGCCGACGCGACGA

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; TYPE: DNA
; ORGANISM: Streptomyces venezuelae
US-09-320-878-20
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NUMBER OF SEQ ID NOS: 34
SOFTWARE: PATENTIN VEr. 2.0
SEQ ID NO 20
LENGTH: 2401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 6.0%; Score 179; DB 3; Length 2401; Best Local Similarity 47.7%; Pred. No. 1.5e-27; Matches 1018; Conservative 0; Mismatches 966; Indels 150; Gaps
                                                                                                                                                                                                                                                                                                  1084 GCTTCCGAGGAGAAACACTCAAGTTCAACGTCTCCAACGGAAAGCCCCTTTATCCACGTCA 1143
                                                                                                                                                                                                                                                                                                                                                                                                                                                   1024 CATACAGTACCACAGAAGCCGTTGTGGCAGGCCTCGACCTCGAGATGCCCGGGACCTCCAC 1083
1204 CGGAGAACGGCCCCGAGACGACTGTCAACAACACCCCCGAAACGGCAGCTCTCCTCCGGA 1263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           315 ACGGTCGCGCGCTCAACCAGGACATGGTCCTGGGCCCGATGATGAACAACATCCGGGTGC 374
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                               1005 TCGCCGAGAACGGCGCGCGCTGCTGCGCGAACGAGGGCCAGGCCCTGCCGCTGGCCGGTG 1064
                                                                                                   1324 AGAAGAAGAAGACGCTGATTGTCGGCCCCAACGCCAAGCAGGCCACATACCACGGCGGAG 1383
                                                                                                                                                                     1264 AGGTTGGCAACGAGGGCATCGTGCTGCTGAAGAACGAGCAACAACGTTCTGCCCTTGAGCA 1323
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| 257 | 2 CCCTCTCCGTGAAGAACACCGGCTCCGTGCCCGGCGCACAGGTGGCCCAGCTCTACGTCA | 251 | Ş |
|------|--|------|----|
| 209 | CCTCGTTCACGCAGAGCGCCCCGACCGTCGTGCGTACGTCCACG | 2037 | DЬ |
| 251 | 5 CCACTTTTGCCTTTTCCAATCTCTCCGTGTCTCACAAGGACGGCAAGCTGAGCGTGT | 245 | Qγ |
| 203 | 7 GCTGGTTCGACAAGGAGAACGTCAAGCCGCTGTTCCCGTTCGGGCACGGCCTGTCGTACA | 197 | Дb |
| 245 | 5 GGTACTACGAGTTTGCCGACAAGGACGTCAATTTCCCCTTTGGCCACGGGCTGTCCTACA | 239 | Оу |
| 197 | 7 CCAGCTACCCGGGCGTCGACAACCAGCAGCAGCGTACCGCGAGGGCATCCACGTCGGGTACC | 191 | ρb |
| 2394 | 5 TCAACTTCCGCACCGAGGCCGGGCGCACGCTGTACGGCGAGGACGTCTACGTCGGGTACA | 233 | Qy |
| 1916 | | 185 | рb |
| 2334 | ල | 2284 | Qy |
| 1856 | | 1797 | Db |
| 2283 | GCGGCAACGAGACGGGCAACTCCATTGGCGACGTCGTCTTTGGCGACTACAACCCCTCGG | 2224 | Qy |
| 1796 | | 1737 | Db |
| 2223 | GCACCCCGAGGAGATGCCCTGGCTCGACGCCACGCCCGCC | 216 | Qy |
| 1736 | | 1677 | Дb |
| - | ACCAGCTCATTGCCGACGTGGCCGCCGCGAACCCCAAACACCCGTCGTCGTCATGCAGACGG | 2104 | Оу |
| 1676 | -CTACGACGACGCACCGAGGGCGTCGACCGTCCGAACCTGTCGCTGCCGGGTACGCAGG | 1618 | рь |
| 2103 | ACGCCGACTGGGAGACCGAGGGCGCGACCGAGCATGAAGCTCCCCCGGCGTGCTGG | 2044 | Qy |
| 1617 | TCGCGAAGGCCGTGGAGTCGGCGCGGAAGGCCCGTACGGCGGTCGTCTTCGC | 1566 | Db |
| 2043 | | 1984 | Qy |
| 1565 | GTGCCACCCCGCTCTCCCTGGAGCTGGGCTGAGGTNACGCCGGCGGCGGCCGACGCACGCACGA | 1506 | рь |
| 98 | TCCCTCCGCGTCGGCGGCTGCAAGGTCATTGACGACCAGGCCGAAAA | 1924 | Qy |
| 1505 | GCACGCACAAGCTCACGATCTCGCGATGA | 1470 | Db |
| | GAGTTCGGCTCCGCACCCACCTACACCCTCAAGGGCGACACCATCG | 1864 | Qy |
| | CCATCGAGGCCGGTCAGGTCTACGGCAAGGTGAGCAGCCCGCTCCTCAAGGTGACCAAGG | 1410 | Db |
| 1863 | | 1804 | Qy |
| 1409 | | 1397 | Db |
| 1803 | | 1744 | Qy |
| 1396 | | 1338 | Db |
| 1743 | a | 1684 | Qy |
| 1337 | | 1278 | Db |
| 1683 | TGGTGGACTACTACCACCCCAAGGCGGCAGACACGTGGTACGCCGACATGGAGGGCACGT | 1624 | Qy |
| 1277 | CCEGCGTTCAACC | 1244 | Db |
| 1623 | - ი | 1564 | Qy |
| 1243 | CGCGCGGTGCGGTGCGACGTGACGTACGAGACGGGTGAGGAGCCTTCGGGACGCAG 1 | 1184 | ф |
| 1563 | AGCAGTGCCTCACGCCCGACGCGCCTCCGGGCATGCGCTGGAGGGGTCTTCAACGAGCCCC 1 | 1504 | Qy |
| 1183 | CTGGGCAGCGCCCACGTCGTCCGGACTCGGCGGCGCGCGC | 1124 | Db |
| 1003 | | 1444 | Qy |

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 5.9%;
Best Local Similarity 47.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQ ID NO 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
APPLICANT: Sherman, D.H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches 1016; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 23, Application US/09105537A Patent No. 6265202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Zhao, L.
TITLE OF INVENTION: DNA encoding methymycin and pikromycin
FILE REFERENCE: 600.438US1
CURRENT APPLICATION NUMBER: US/09/105,537A
CURRENT FILING DATE: 1998-06-26
NUMBER OF SEQ ID NOS: 43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Liu, H. APPLICANT: Xue, Y. APPLICANT: Zhao, I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: FastSEQ for Windows Version 3.0
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                     1024 CATACAGTACCACAGAAGCCGTTGTGGCAGGCCTCGAGCTCGAGATGCCCGGACCTCCAC 1083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 2430
830 C---CCCGGGCACCGACGCCATCACCAAGGGCCTCGACCAGGAGATG------ 873
                                                                              770 ACAACGTGCTGCGCACGCAGTGGGGCTTCCAGGGCTGGGTGATGTCCGACTGGCTCGCCA 829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2632 TCGAACTGCAGCCCGGCGAGACGAAGGCGGTGAC 2665
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                                                                                                                        964 ATGGGATGCTTCGAAAGGAATGGGGTTGGGATGGCCTAATCATGAGCGACTGGTACGGCA 1023
                                                                                                                                                                  710 TCATGTGTGCCTACAACGGCCTCAACGGGAAGCCGTCCTGCGGCAACGACGAGCTCCTCA 769
                                                                                                                                                                                     904 TCATGACGGCGTACAATGGCATCAATGGCGTGTCGTGCAGGGAGAACCCTAAATATCTTG 963
                                                                                                                                                                                                                                                   653 TCCGCGAGATCGAGTTCCCGGCGTTCGAG---GCGTCCTCCAAGGCCGGCGCGCCCTCCT
                                                                                                                                                                                                                                                                             844 TCCGTGAAATCTACGCACTCCCGGTTCCAGATTGCTGTGCGAGACTCCCAGCCGGGTGCGT 903
                                                                                                                                                                                                                                                                                                                                    593 CGGCCAACAACCAGGAGAACAACCGCTTCTCCGTGAACGCCAATGTCGACGAGCAGACGC
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                                                                                                                                                                                                                                                                                                                                                                                                                                           724 CTGCGGCTCTCATCCGCGGCATTCAGAGCACTGGAGTGCAGGCTACGATCAAGCACTTTT 783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 473
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            604 AGGCCATCGCTAAGAGTGCGCATGTGATCCTCGGCCCGACTATCAACATGCAACGCTCCC 663
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            544 CGCTCGGTTCCACATTCAACCAAACTCTGCTCGAAGAGGCAGGTAAGATGATGGGCAAAG 603
                                                                                                                                                                                                                                                                                                                                                                                                                     CGGTCGCCCAGATCAAGGGCATCCAGGGTGCGGGTCTGATGACCACGGCCAAGCACTTCG 592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGCACGGCGGCCGGAACTACGAGACCTTCAGCGAGGACCCCCTGGTCTCCTCGCGCACCG 532
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 175.2; DB 4; Length 2430; Pred. No. 8.8e-27; 0; Mismatches 968; Indels 150;
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| 1775 ACAAGCTGATCTCGGCTGTCGCGGACGCCAACCCGAACACGATCGTGGTCCTCAACACCG 2164 GCACCCCGGGGGGGGGGGCTGGCTCGACGCCACGCCCGCC | Qy Db | |
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| 2044 KONTORA INGRAMACIONAS GUECCIARCIGIGIGAGIATIGAAGCTICCCCGGGGTGCTGG 1716 -CTACGACGACGACCGACCGAGGCGTCGACCGTCGGACCTGTCGCTGCCGGGTACGCAGG 1716 -CTACGACGACGACCGACCGACCGTCGGACCTGTCGCTGCCGGGTACGCAGG | Db XX | |
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| | | |
| 1924 TCCCCGGCCACGGCTCCCCCCGCGCTGCGACGGTCAATGACGACCAGGCCGAAA | | |
| 1568 GCACGCACAAGCT | DЬ | |
| 1864 ACAAGTTCAAGATCGAGTTCGGCTCCGCACCCACCTACACCCTCAAGGGCGACACCATCG | Qy | |
| 1 | Db | |
| 1890 TCTTCGGCTCCGCCACCCGGGAGGAGAGACGGGCGCATCAATCTCGTCAAGGGCAACATCT | ρ g | |
| CGTACGTAGACGACCAGCTCGTCGTCGACAACGCCACCAAGCAGGTC | Qy | |
| | Db v | |
| 1376 AGGGCCACCAGCTCGAGCCGGGCAAGGCGGGGGGCGCTGTACGACGGCACGCTGAC | Q Db | |
| 1624 TGGTGGACTACTACCACCCCAAGGCGGCAGACACGTGGTACGTGGCGGACATGGAGGGCACGT | Qy | |
| 1564 CTGGTACCCCTÀACCGCCAGCACATTGACGAGCTCTTCTTCACCAAGACĞGACATGCACC | Оy | |
| | Db | |
| 1504 AGCAGTGCCTCACGCCCGACGGCGCTCCGGGCATGCGÇTGGAGGGTCTTCAACGAGCCCC | Qy | |
| 1444 TCGAGACGCCGCCATCGTACACCGTCGGCGCCTACACCACCGTTCCTCCCATTCTAGGCG | Db | |
| | Db | |
| 1384 GCTCTGCCGCACTCAGGGCCTACTACGCAGTCACTCCCTTTGACGGCCTCAGCCAAGCA | Qy | _ |
| 103 TOGCCGAGAACGGCGCGCGCTCCTGCGCAACGAACGAGGCCCTGCCCTCGCCGCTG | Db . | |
| | 2 B | |
| 1264 AGGTTGGCAACGAGGCATCGTGCTGCTGCAGGAACGAGAACGAGAACGTTCTGCCCTTGAGCA | Qy | |
| 983 CCGTGACGCGGTCGGCGGAGCGGATCGTCGGCCAGATGGAGAAGTTCGGTCTGCTCCTCG | Db | |
| 1204 CGGAGAACGGCCCCGAGACGACTGTCAACAACACCCCCGAAACGGCAGCTCTCCTCCGGA | Qy | |
| 926 AGTTCTTCGGCGAGGCGCTGAAGACGGCCGTCCTGAACGGCACGGTCCCCGAGGCGG | DЬ | |
| 1144 TTGACCAGAGGGCTAGGGAAGTTCTTCAGTTCGTCAAGAAGTGTGCTGCCTCCGGAGTGA | Qy | |
| 874GCGTCGAGCTCCCCGGCGACGTCCCGAAGGGCGAGCCCTCGCCGCCGGCCA | Db | |
| 1084 GCTTCCGAGGAGAAACACTCAAGTTCAACGTCTCCAACGGAAAGCCCTTTATCC | Qy | |

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; ORGANISM: Streptomyces venezuelae
US-09-105-537-3
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US-09-105-537-3
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                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Liu, H.
APPLICANT: Xue, Y.
APPLICANT: Zhao, L.
APPLICANT: Zhao, L.
TITLE OF INVENTION: DNA encoding methymycin and pikromycin
FILE REFERENCE: 600.438US1
CURRENT APPLICATION NUMBER: US/09/105,537A
CURRENT FILING DATE: 1998-06-26
NUMBER OF SEQ ID NOS: 43
SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                             Matches 1016; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2335 TCAACTTCCGCACCGAGGCCGGGCGCACGCTGTACGGCGACGACGTCTACGTCGGGTACA 2394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1955 GCAAGCTCACGCAGAGCTTCCCGGCCGCCGAGAACCAGCACGCGGTCGCCGGCGACCCGA 2014
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1895 CGGGCCAGGCGGCGCGAGGCCACCGCGCGCGCTCTACGGTGACGTCAACCCGAGCG
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                                                                             4724 ACGGTCGCGCGCTCAACCAGGACATGGTCCTGGGCCCGATGATGAACAACATCCGGGTGC 4783
                                                                                                                                                             4664 CCCTGGCCAGCACCTTCGACGACACCATGGCCGACAGCTACGGCAAGGTCATGGGCCGCG 4723
  4784 CGCACGGCCGGCAACTACGAGACCTTCAGCGAGGACCCCCTGGTCTCCTCGCGCACCG 4843
                                                                                                                                                                                                    544 CGCTCGGTTCCACATTCAACCAAACTCTGCTCGAAGAGGCAGGTAAGATGATGGGCAAAG 603
                     664 CTCTCGGTGGACGTGGGTTCGAGTCGATTGGTGAGGATCCGTTCCTGGCGGGCTTGGGAG 723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCTCGTTCACGCAGAGCGCCCCGACCGTCGTGCGTACGTCCACGGGTGGTCTGAAGGTCA 2194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGCCCCTCCAAGCGGCCAAGATTAACCGCCCCGTCAAGGAGCTCAAGGGCTTCGCAAAGG 2631
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                                                                                                       AGGCCATCGCTAAGAGTGCGCATGTGATCCTCGGCCCGACTATCAACATGCAACGCTCCC 663
                                                                                                                                                                                                                                                                  5.9%;
                                                                                                                                                                                                                                             Score 175.2; DB 4; Length 13613; 
Pred. No. 1.5e-26; 
0; Mismatches 968; Indels 150;
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| 1863 | TCTTCGGCTCCGCCACCCGCGAGGAGACGGGCCGCATCAATCTCGTCAAGGGCAACACGT | 1804 | Qy |
|------|---|-------|------|
| 5818 | | 5806 | Db |
| 1803 | CGTACGTAGACGACCAGCTCGTCGTCGACAACGCCAACCAA | 1744 | Ωу |
| 5805 | CGGCGACGGCGAGTACGCCATCGCGGTCGTGCACGGTGGTTACGCCACGGTGCAG- | 5747 | Db |
| 1743 | ACACCGCCGACGAGGACTGCACCTACGAGCTCGGCCTCGTCGTCTGCGGCACGCAAAGG | 1684 | Qy |
| 5746 | | Ō | Db - |
| 1683 | TGGTGGACTACTACCACCCCAAGGCGGCAGACACGTGGTACGCCGACATGGAGGGCACGT | 1624 | Qγ |
| 5686 | ATCCCGGCGGGAACCTCAGCC-CGGCGTTCAACC | 5653 | Db . |
| 1623 | CTGGTACCCCTAACCGCCAGCACATTGACGAGCTCTTCTTCACCAAGACGGACATGCACC | 1564 | Qy |
| 5652 | CGCGCGGGTGCGGCGTGACGTACGAGACGGTGAGGAGACCTTCGGGACGCAG | 5593 | Db : |
| 1563 | AGCAGTGCCTCACGCCCGACGGCGCTCCGGGCATGCGCTGGAGGGTCTTCAACGAGCCCC | 1504 | Qy |
| 5592 | CTGGGCAGCCCACGTCGTCCCGGACTCGGCGCGCGCGCCACTCGACACCATCAAGGCC | 5533 | Дb |
| 1503 | TCGAGACGCCGCCATCGTACACCGTCGGCGCTACACCACCGTTCCTCCATTCTAGGCG | 1444 | VΩ |
| 5532 | ACGCCGGCAAGAGCATCGCGGTCATCGGCCCGACGGCCGTCGAC-CCCAAGGTCACCGGC | 5474 | Db |
| 1443 | GCTCTGCCGCACTCAGGGCCTACTACGCAGTCACTCCCTTTGACGGCCTCAGCAAGCA | 1384 | Ωу |
| 5473 | TCGCCGAGAACGGCGCGCTCCTGCGCAACGAGGGCCCTGCCGCTCGCCGGTG | 5414 | Db |
| 1383 | AGAAGAAGAAGACGCTGATTGTCGGCCCCAACGCCCAAGCAGGCCACATACCCACGGCGAG | 1324 | Qy |
| 5413 | ccactccggcgccgccgagagagagagagagagagagaga | 5354 | Дb |
| 1323 | AGGTTGGCAACGAGGGCATCGTGCTGCTGCTGAAGAACGAAC | 1264 | Qy |
| 5353 | CCGTGACGCGGTCGGCGGAGCGGATCGTCGTCTCCTCG | 5294 | Db |
| 1263 | CGGAGAACGGCCCGAGACGACTGTCAACAACACCCCGGAAACGGCAGCTCTCCTCGGA | 1204 | Qγ |
| 5293 | AGTTCTTCGGCGA GGCGCTGAAGACGGCCGTCCTGAACGGCACGGTCCCCGAGGCGG | 5237 | Db |
| 1203 | TTGACCAGAGGCTAGGGAAGTTCTTCAGTTCGAAGAAGTGTGCTGCCTCCGGAGTGA | 1144 | Qy |
| 5236 | | 5185 | 뫄 |
| 1143 | GCTTCCGAGGAGAAACACTCAAGTTCAACGTCTCCAACGGAAAGCCCTTTATCCACGTCA | 1084 | Qy |
| 5184 | CCCCGGGCACCGACGCCATCACCAAGGGCCTCGACCAGGAGATG | 5141 | Db |
| 1083 | ATACAGTACCACAGAAGCCGTTGTGGCAGGCCTCGACCTCGAGATGCCCGGACCTCCAC | 1024 | Qy |
| 5140 | | 5081 | Db |
| 1023 | ATGGGATGCTTCGAAAGGAATGGGGTTGGGATGGCCTAATCATGAGCGACTGGTACGGCA | 964 | Qy |
| 5080 | | 5021 | Db |
| 963 | TCATGACGGCGTACAATGGCATCAATGGCGTGTCGTGCAGCGAGAACCCTAAATATCTTG | 904 | Оy |
| 5020 | | 4964 | Db |
| 903 | | 844 | Qy |
| 4963 | CGGCCAACAACCAGCAGAACAACCGCTTCTCCGTGAACGCCAATGTCGACGAGCAGACGC | 4904 | DЬ |
| 843 | | 784 | Qy |
| 4903 | CGGTCGCCCAGATCAAGGCCATCCAGGGTGCGGGTCTGATGACCACGGCCAAGCACTTCG | 44 | dd |
| 783 | TIGCGGCTCTCATCCGCGGCATTCAGAGCACTGGAGTGCAGGCTACGATCAAGCACTTTT | 724 (| Qy |

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RESULT 5
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                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                               Sequence 1, Application US/09428517 Patent No. 6251636
APPLICANT: Betlach, Mary C.
APPLICANT: Shah, Sanjay Krishnakant
APPLICANT: McDaniel, Robert
APPLICANT: Tang, Li
TITLE OF INVENTION: RECOMBINANT OLEANDOLIDE POLYKETIDE SYNTHASE
FILE REPEROCE: 30062-20029.00
CURRENT APPLICATION NUMBER: US/09/428,517
CURRENT FILING DATE: 1999-10-28
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RESULT 6 US-09-134-078-5

Sequence 5, Application US/09134078
Patent No. 6368844
GENERAL INFORMATION:
APPLICANT: Bylina, Edward J.

TITLE OF INVENTION: GINUMBER OF SEQUENCES: 7

ADDRESSEE:

Gray Cary Ware & Freidenrich LLP

GLYCOSIDASE ENZYMES

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LENGTH: 50937
TYPE: DNA
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Best Local Similarity
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EARLIER FILING DATE: 1999-02-16
EARLIER FILING DATE: 1999-0106,100
EARLIER FILING DATE: 1998-10-29
NUMBER OF SEQ ID NOS: 12
SOFTWARE: Patentin Ver. 2.1
      2817
                          2636 ACTGCAGCCCGGCGAGACGAAGGCGGTGACAATCGAGGAGGAGCAGGAGGAGGTACGTC 2690
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GCTGCGGCCGGGCGAGAGCAGGAGGCTGACCCTGCACGTCGAGCGCAGGGCCCCTC 2763
                                                                                GTCCCCGCACGTGCGGGTGGCCCAGGCCAAGCGTGCCCTGGCGGCCTACGGGAAGGTCGA
                                                                                                                     CCTCCAAGCGGCCAAGATTAACCGCCCCGTCAAGGAGCTCAAGGGCTTCGCAAAGGTCGA 2635
                                                                                                                                                                                                                                                  CTTCGACTACCGGGACCTGAAGGTGACGGCGACGGCGGACGGCGGGCTCGACGTCTGCTT
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                                                                                                                                                                                                                                                                                     TTTTGCCTTTTCCAATCTCTCCGTGTCTCACAA---GGACGGCAAGCTGAGCGTGTCCCT 2515
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Pred. No. 6.4e-19;
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Best Local (
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MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE: 10-OCT-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
LENGTH: 2166 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 06-DEC-1996
ATTORNEY/AGENT INFORMATION:
NAME: Haile, Lisa A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STREET: ***.
CTTY: San Diego
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                                                                                                                                                                                                                                                                                                                                                                                                                  378 TCTTTGTGGAAGGAATTTCGAGTACTACTCAGAAGATCCTGTCCTTTCCGGTGAAATGGC 437
                                                                                                                                                                                                                                                                                                                                                                                                                                                         665 TCTCGGTGGACGTGGCTTCGAGTCGATTGGTGAGGATCCGTTCCTGGCGGGCTTGGGAGC 724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE/DOCKET NUMBER: 09
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US/09/134,078
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY:
                                                                                                                                                                                                        845 CCGTGAAATCTACGCACTCCCGTTCCAGATTGCTGTGCGAGACTCCCAGCCGGGTGCGTT 904
                                                                                                                                                                                                                                                                                                                                   438 TTCAGCCTTTGTCAAGGGAGTTCAATCTCAAGGGGTGGGAGCCTGCATAAAACACTTTGT 497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/056,916 FILING DATE: 06-DEC-1996
678 GAAGGTTCTCAGGGAAGAATGGGGGATTTGGCGGTTTCGTGATGAGCGACTGGTACGCGGG 737
                                       965 TGGGATGCTTCGAAAGGAATGGGGTTGGGATGGCCTAATCATGAGCGACTGGTACGGCAC 1024
                                                                                618 GATGAGCGCTTACAACAAACTGAATGGAAAATACTGTTCACAGAACGAATGGCTTTTGAA 677
                                                                                                                       905 CATGACGGCGTACAATGGCATCAATGGCGTGTCGTGCAGCGAGAACCCTAAATATCTTGA 964
                                                                                                                                                                558 CAGAGAAATATATCTGAAAGGTTTTGAAATTGCTGTCAAGAAAGCAAGACCCTGGACCGT 617
                                                                                                                                                                                                                                                 785 GTGCAATGATCAGGAGGACAGGCGCATGATGGTGCAGAGCATCGTCACGGAGCGGGCTCT 844
                                                                                                                                                                                                                                                                                                                                                                           725 TGCGGCTCTCATCCGCGGCATTCAGAGCACTGGAGTGCAGGCTACGATCAAGCACTTTTT 784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRANDEDNESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
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858/677-1465
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FastSEQ for Windows Version 2.0
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US-09-103-840A-2
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; OTHER INFORMATION: CDC 1551
; OTHER INFORMATION: "n" bases at various positions throughout the sequence
; OTHER INFORMATION: represent a, t, c or 9
US-09-103-840A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Db 217750 GTCGCCTACGCCAACGCGAATACCGTTGTGGTGCTTGAGACGGGCAACCCGGTGACCATG 217809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Db 217690 GAGGGCTTCGACAGCGCCGATCTGTCGCTGCCATGGGGTCAGGATGCGCTGATCGCCGCA 217749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Db 217930 TTCCCGGTCGATCTCGGTCAGACGCCACGCTCGCAACCGCCCGAGCTCGGTGCCCCGTGG 217989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Db 217870 CAGGCCGTTGCGGAGATTGTGACCGGGCAGGTGAATCCTTCGGGCCGGCTGCCGATCACC 217929
                                                                                                                                                                                                                                                                                 Db 218050 AGCACAAATCAGACCCCGATGTTCGCGTTCGGTCACGGCTTGTCCTATAÇCAGTTTCGAG 218109
                                                                                                                                                                                                                                                                                                                                                                                              Db 217990 GGGACATCGACCACGATCCACTACACCGAGGCCGCCGATGTTGGTTACCGCTGGTTTGCC 218049
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 3.8%;
Best Local Similarity 52.0%;
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CURRENT APPLICATION NUMBER: US/09/103,840A
CURRENT FILING DATE: 1998-06-24
NUMBER OF SEQ ID NOS: 2
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APPLICANT: WHITE, Owen R.
APPLICANT: FRASER, Claire M.
APPLICANT: VENTER, John C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: DNA SEQUENCES FOR STRÂIN ANALYSIS IN MYCOBACTERIUM TITLE OF INVENTION: TUBERCULOSIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        217810 CCCTGGCGCGACTCGGTGAACGCCATCATGCAGGCCTGGTATCCGGGCCAGGCGGGTGGC 217869
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                                                        218167 AACACGGGCGACCGCAGCGGGGGGGGGATGTCCCGGCAGCTGTATATGATCGCAGCTCCCCGGC 218226
                                                                                                                                                                      218110 TATCGTGACCTGGTGGTGACGGGC---GGCCACACCGTGCACGCCAGTTTCAGCGTTACC 218166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Mycobacterium tuberculosis
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2181 CCCTGGCTCGACGCCACGCCCGCCGTCATCCAGGCCTGGTACGGCGGCAACGAGACGGGC 2240
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                                                                                                                                                                                                                           2466 TTTTCCAATCTCTCCGTGTCTCACAAGGACGGCAAGCTGAGCGTGTCCCTCTCCGTGAAG 2525
                                                                                                             2526 AACACCGGCTCCGTGCCCGGCGCACAGGTGGCCCAGCTCTACGTCAAGCCCCTCCAAGCG 2585
2586 GCCAAGATTAACCGCCCCGTCAAGGAGCTCAAGGGCTTCGCAAAGGTCGAACTGCAGCCC 2645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTCCCCAAGCGCCTGCAGGACAACCCCGCGTTTCTCAACTTCCGCACCGAGGCCGGGCG- 2359
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Pred. No. 8.2e-13;
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Db 218001 TATCGTGACCTGGTGGTGACGGGC---GGCCACACCGTGCACGCCAGTTTCAGCGTTACC 218057
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                                                                                                                                                                                                                                                                                                                                                                                                          Db 217821 TTCCCGGTCGATCTCGGTCAGACGCCACGCTCGCAACCGCCCGAGCTCGGTGCCCCGTGG 21788C
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: TYPE: DNA
: ORGANISM: Mycobacterium tuberculosis
: OTHER INFORMATION: H37RV
US-09-103-840A-1
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Best Local Similarity 52.0%;
Matches 345; Conservative
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TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
TITLE OF INVENTION: TUBERCULOSIS
FILE REFERENCE: 24366-2007.00
CURRENT APPLICATION NUMBER: US/09/103,840A
CURRENT FILING DATE: 1998-06-24
NUMBER OF SEQ ID NOS: 2
SOFTMARE: Patentin Ver. 2.1
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                                                                                                                                                                                                                                                                                                                                                                         2360
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              2526 AACACCGGCTCCGTGCCCGGCGCACAGGTGGCCCAGCTCTACGTCAAGCCCCCTCCAAGCG 2585
                                                                                                                                                                                                                                                                                                                                                                                                                                                               2301 TICCCCAAGCGCCTGCAGGACAACCCCGCGTTTCTCAACTTCCGCACCGAGGCCGGGGG- 2359
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                                                                                                                           TTTTCCAATCTCTCCGTGTCTCACAAGGACGGCAAGCTGAGCGTGTCCCTCTCCGTGAAG 2525
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Pred. No. 8.2e-13;
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Db 12905 GCGGTGCGGACCTGACGCGCGACCCGCGTGGCGGCGCAACTTTGAATATGCGGGCGAAG 12964
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                                                                                                                                                                                                                                                              Matches 246; Conservative
                                                                                                                                                                                                                                                                           Query Match 3.4%; Score 101.4; DB 4; Length 16836; Best Local Similarity 50.5%; Pred. No. 1.6e-11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/09/147,236A CURRENT FILING DATE: 1999-04-08
EARLIER APPLICATION NUMBER: PCT/JP97/03633
EARLIER FILING DATE: 1997-10-09
NUMBER OF SEQ ID NOS: 12
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 1
                                                                                                                                                12845 AGGCCGGTGTCATGATCGGGCGCGAGGCATGGCAGAGCGGCTTCAACATCCTGCTTGGCG 12904
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APPLICANT: TSUCHIDA, Takayasu
APPLICANT: YOSHINAGA, Fumihiro
APPLICANT: TAHARA, Naoki
APPLICANT: HAYASHI, Takahisa
TITLE OF INVENTION: NOVEL GENE, GROUP OF GENES, AND NOVEL BETA-GLUCOSIDASE
FILE REFERENCE: 6537-011-DCT
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                                                                                                                                                                                                                                                                                                                                                                                    OTHER INFORMATION: n at positions 15741 and 15767 may be a, g, t, OTHER INFORMATION: c
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LOCATION: (12448)..(14652)
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700 ATCCGTTCCTGGCGGCTTGGGAGCTGCGGCTCTCATCCGCGGCATTCAGAGCACTGGAG 759
                                                                                                 640 CGACTATCAACATGCAACGCTCCCCTCTCGGTGGACGTGGCTTCGAGTCGATTGGTGAGG 699
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(7784)..(11761)
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(5373)..(7778)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO 10
                                                                                                                                                                                                                                                                           Query Match 3.4%;
Best Local Similarity 50.5%;
                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/09/147,236A CURRENT FILING DATE: 1999-04-08 EARLIER APPLICATION NUMBER: PCT/JP97/03633 EARLIER FILING DATE: 1997-10-09 NUMBER OF SEQ ID NOS: 12
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APPLICANT: TSUCHIDA, Takayasu
APPLICANT: YOSHINAGA, Fumihiro
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APPLICANT: HAYASHI, Takahisa
TITLE OF INVENTION: NOVEL GENE, GROUP OF GENES, AND NOVEL BETA-GLUCOSIDASE
FILE REFERENCE: 6537-011-0PCT
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                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE: OTHER INFORMATION: Nucleotide sequence is the same as SEQ ID NO:1
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                                               12905 GCGGTGCGGACCTGACGCGCGACCCGCGTGGCGGCGCAACTTTGAATATGCGGGCGAAG 12964
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                                                                                              640 CGACTATCAACATGCAACGCTCCCCTCTCGGTGGACGTGGCTTCGAGTCGATTGGTGAGG 699
700 ATCCGTTCCTGGCGGGCTTGGGAGCTGCGGCTCTCATCCGCGGCATTCAGAGCACTGGAG 759
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                                                                                                                                                          INFORMATION FOR SEQ ID NO:
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                                                                                                                                                                                                                                                   CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: MURPHY JR, GERALD M.
NOTICETRATION NUMBER: 28,977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES: 5
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                  MOLECULE TYPE:
ORIGINAL SOURCE:
                                                                                             SEQUENCE CHARACTERISTICS:
LENGTH: 12588 base pairs
TYPE: nucleic acid
                                                                                                                                                                                               TELECOMMUNICATION INFORMATION: TELEPHONE: 703-205-8000
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                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                          TOPOLOGY:
                                                                                                                                                                                                                                REGISTRATION NUMBER: 28, REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY: USA
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                                                                             STRANDEDNESS:
ORGANISM:
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SKJAK-BRAEK, GUDMUND
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Azotobacter vinelandii
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                                     DNA (genomic)
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3381 CCTCGAAGGCAGCGCGGCAACGATGCGCTGAGCGGGACCGAGGCCCCACGAGACGCTGCT 3440
                                      2315 GCAGGACAACCCCGCGTTTCTCAA-----CTTCCGCACCGAGGCCGGGCGCACGCTGTA 2368
                                                                            3321 ACGGCTGTATGGCGCCAACTCGACGGTTTCCAGCCAGTCCGGCAGTGGCCAGCAGCGAC
                                                                                                                2255 CGTCGTCTTTGGCGACTACAACCCCTCGGGCAAGCTGTCCCTCAGCTTCCCCAAGCGCCT 2314
                                                                                                                                                      2195 CACGCCCGCCGTCATCCAGGCCTGGTACGGCGACACGAGACGGGCAACTCCATTGCCGA 2254
                                                                                                                                                                                                                                   3201 CGAAGGCAACGTCATCAGCGGCTCGGCCAATTCCACCTACGGCATCCAGGAGCGCGCCGA 3260
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LOCATION:
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Local Similarity 43.3%;
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Pred. No. 3.8e-08;
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US-09-197-649-7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
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APPLICANT: Tuerk, Cralg
APPLICANT: Pribnow, David
APPLICANT: Smith, Jonathan D.
TITLE OF INVENTION: Systematic Polypeptide Evolution by Reverse Translation
FILE REFERENCE: NEXO2/C1-CON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/09/197,649
CURRENT FILING DATE: 1998-11-23
EARLIER APPLICATION NUMBER: 07/2829,461
EARLIER FILING DATE: 1992-01-31
EARLIER APPLICATION NUMBER: 07/739,055
EARLIER FILING DATE: 1991-08-01
EARLIER APPLICATION NUMBER: 07/561,968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EARLIER FILING DATE: 1990-08-02 NUMBER OF SEQ ID NOS: 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Artificial Sequence FEATURE: OTHER INFORMATION: Description of Artificial Sequence: Sequence OTHER INFORMATION: having a 120 repeat of ACG flanked by fixed OTHER INFORMATION: fragments having NCOI restriction sites.
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                                         1781 CAAGCAGGTCCCCGGCGATGCCTTCTTCGGCTCCGCCACCCGCGAGGAGACGGGCCGCAT 1840
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3621 CGACGAGGACAGCATCGACCT 3641
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                                                                                                                                                                                                                                                  Local Similarity
                                                                                CACCGACAGCTACCGCACCGACAGCGCCAGCTTCAACGACCTGATCACCCGACTTCGACGC 3620
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                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 84.4; DB 4;
Pred. No. 1.3e-08;
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                                                                                                                                                                                                                                                                                                                                                                                                                                  INFORMATION FOR SEQ ID NO: 1: SEQUENCE CHARACTERISTICS:
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APPLICANT: Shoemaker, Sharon

TITLE OF INVENTION: Saccharification of Cellulose by Cloning and

TITLE OF INVENTION: Amplification of the Beta-glucosidase Gene of Trichoderma Rees
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MEDIUM TYPE: Floppy disk
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-846-7555
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NAME: Stone, Christopher L.
REGISTRATION NUMBER: 35,696
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FEATURE:
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CITY: Palo Alto
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376..445
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US-08-462-090-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL
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                 CLASSTETTO: PC-DOS/MS-DOS PC-MAKE: PatentIn Release #1.0, Version CURENT APPLICATION DATA: US/08/462 CLASSTETTO: 05-TING DATE: 0
                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Shoemaker, Sharon TITLE OF INVENTION: Saccharification of Cellulose by Cloning TITLE OF INVENTION: and Amplification of the Beta-glucosidase Gene of TITLE OF INVENTION: Trichoderma Reesei
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1197 ACGACTGTCCAAAGCGCGAATTCTGGGCTTGACATGTCAATGCCTGG 1243
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                                                                                                                                                                                                                                                                                          COUNTRY:
                                                                                                                                                                                                                                                                                                                          STATE:
                                                                                                                                                                                                                                                                                                                                           CITY: Alexandria
                                                                                                                                                                                                                                                                                                                                                                           STREET:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INFORMATION:
                                                                                                                                                                                                                                                                   22313-1404
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                                                                                                                                                                                                                                                                                                                       Virginia
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                                                                                                                                                                                                                                                                                                                                                                                                           Swecker & Mathis
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US-08-462-090-1
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Best Local Similarity
Matches 264; Conserv
                           1029 AGTACCACAGAAGCCGTTGTGGCAGGCCTCGAGACTCGAGATGCCCGG 1075
                                                                                   1137 GTGCTGAAAGACCAGCTGGGGTTCCCCAGGCTATGTCATGACGGACTGGAACGCACAGCAC 1196
                                                                                                                                                                                                                                                             1020 GAGCTGTATACTTGGCCATTTGCCGACGCGGTTC---AGGCCAATGTCGCTTCTGTCATG
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                                                                                                                              969 ATGCTTCGAAAGGAATGGGGTTGGGATGGCCTAATCATGAGCGACTGGTACGGCACATAC 1028
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HYPOTHETICAL: N
ANTI-SENSE: NO
                                                                                                                                                                                                                909 ACGGCGTACAATGGCATCAATGGCGTGTCGTGCAGCGAGAACCCTAAATATCTTGATGGG 968
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA:
APPLICATION NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRANDEDNESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE/DOCKET NUMBER: 01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REGISTRATION NUMBER: 25,4:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
ACGACTGTCCAAAGCGCGAATTCTGGGCTTGACATGTCAATGCCTGG 1243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCCTCGGGGATTCATGTCATACTTGGTCCTGTGGCTGGGCCGCTGGGAAAGACTCCGCAG 839
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US-08-463-461-1
                                                                                                                                                                                                             Matches 264;
                                                                                                                                                                                                                                               Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INFORMATION FOR SEQ ID NO: 1:
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                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
840 GGCGGTCGCAACTGGGAGGGCTTCGGTGTCGATCCATATCTCACGGGCATTGCCCATGGGT 899
                                669 GETGGACGTGGCTTCGAGTCGATTGGTGAGGATCCGTTCCTGGCGGGCCTTGGGAGCTGCG 728
                                                                                                                                                                                                                                                                                                                                    FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ANTI-SENSE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
LENGTH: 3033 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOPTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
                                                                  780 GCCTCGGGGATTCATGTCATACTTGGTCCTGTGGCTGGGCCGCTGGGAAAGACTCCGCAG 839
                                                                                                  612 GCTAAGAGTGCGCATGTGATCCTCGGCCC---GACTATCAACATGCAACGCTCCCCTCTC 668
                                                                                                                                    720 TCGACGTGGGATGTCAATTTGATCCGCGAACGTGGACAGTTCATCGGTGAGGAGGTGAAG 779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HYPOTHET ICAL:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELECOMMUNICATION INFORMATION:
                                                                                                                                                                    552 TCCACATTCAACCAAACTCTGCTCGAAGAGGCCAGGTAAGATGATGGGCAAAGAGGCCATC 611
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION:
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                NAME/KEY:
                                                                                                                                                                                                                               Local Similarity
                                                                                                                                                                                                                                                                                                   LOCATION:
                                                                                                                                                                                                                                                                                                                                                  LOCATION:
                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                    LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: FILING DATE: 05-JU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Palo Alto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Christopher L. Stone TRATION NUMBER: 35,696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RY: U.S.A.
94304-1013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  California
                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                            intron
2206..2269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           415-845-6504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 925 Page Mill Road
                                                                                                                                                                                                                                                                                                                                                intron
376..445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Fowler, Timothy
Barnett, Christopher C.
Shoemaker, Sharon
                                                                                                                                                                                                                                                                                                                                                                                                                    CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Trichoderma reesei
                                                                                                                                                                                                                                                                                                                                                                                               join(311..375, 446..2205, 2270..2679)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             415-846-7555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Genencor International, Inc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              05-JUN-1995
                                                                                                                                                                                                                            2.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Saccharification of Cellulose by Cloning and Amplification of the Beta-glucosidase Gene of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Trichoderma Reesei
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US/08/463,461
                                                                                                                                                                                                          0; Mismatches 257; Indels
                                                                                                                                                                                                                          Score 83.8; DB 3; Pred. No. 3.4e-08;
                                                                                                                                                                                                                                          Length 3033;
                                                                                                                                                                                                          6;
                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                        2
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Вþ γ 망 밁 δÃ Ş В QΥ В 1197 ACGACTGTCCAAAGCGCGAATTCTGGGCTTGACATGTCAATGCCTGG 1243 1029 AGTACCACAGAAGCCGTTGTGGCAGGCCTCGACCTCGAGATGCCCGG 1075 1137 GTGCTGAAAGACCAGCTGGGGTTCCCAGGCTATGTCATGACGGAACTGGAACGCACAGCAC 1196 1077 TGCTCGTACAACAAGGTCAATACCACCTGGGCCTGCGAGGATCAGTACACGCTGCAGACT 1136 969 ATGCTTCGAAAGGAATGGGGTTGGGATGGCCTAATCATGAGCGACTGGTACGGCACATAC 1028 909 ACGGCGTACAATGGCATCAATGGCGTGTGCAGCGAGAACCCTAAATATCTTTGATGGG 968

Search completed: May 3, 2003, 22:13:50 Job time : 3750.91 secs